

03050109-060

(*Big Brushy Creek*)

General Description

Watershed 03050109-060 is located in Pickens and Anderson Counties and consists primarily of *Big Brushy Creek* and its tributaries. The watershed occupies 23,652 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Madison series. The erodibility of the soil (K) averages 0.26 and the slope of the terrain averages 15%, with a range of 2-40%. Land use/land cover in the watershed includes: 48.7% forested land, 30.1% agricultural land, 19.9% urban land, 0.5% water, 0.4% barren land, and 0.4% forested wetland (swamp).

The Big Brushy Creek watershed drains into the Saluda River near the Town of Piedmont. Big Brushy Creek is formed by the confluence of Brushy Creek and Middle Branch (Hornbuckle Creek). Little Brushy Creek flows into Big Brushy Creek near the base of the watershed. This watershed contains a total of 44.6 stream miles and 110.3 acres of lake waters, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
S-301	W/INT/BIO	FW	BIG BRUSHY CREEK AT S-04-143

Big Brushy Creek (S-301) - Aquatic life uses are partially supported based on macroinvertebrate community data. Recreational uses are partially supported due to fecal coliform bacteria excursions.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM</i>	<i>NPDES#</i>
<i>FACILITY NAME</i>	<i>TYPE</i>
<i>PERMITTED FLOW @ PIPE (MGD)</i>	<i>COMMENT</i>
MIDDLE BRANCH	SC0039853
EASLEY COMBINED UTILITY/MIDDLE BRANCH PLT	MAJOR DOMESTIC
PIPE #: 001 FLOW: 3.5	

Growth Potential

Portions of the City of Easley and the Towns of Powdersville and Piedmont are located in this watershed. The southern edge of the City of Easley and the I-85 corridor are high growth areas in the watershed. Other areas of potential growth are the presently unserved interstate interchanges, which have regional plans to be upgraded with water and sewer to encourage development. Regional wastewater facilities have been upgraded to allow for growth. There are also several industrial sites dispersed through the watershed.

Watershed Protection and Restoration Strategies

Special Projects

Assessing Water Quality in the Saluda River Watershed

Furman University has recently completed a three-year project that was to determine the sources of impairments on several tributaries and reaches of the Saluda River. These impairments include high fecal coliform counts detected in the in Coronaca Creek; and an impaired macroinvertebrate community in Broad Mouth Creek. A stream sampling program was conducted in 2001, 2002, and 2003 with 182 sites sampled within the ten watersheds of the Middle Saluda River, the South Saluda River, a small tributary to the Saluda River north of the Town of Pelzer, Broad Mouth Creek, **Big Brushy Creek**, the Bush River, Scotts Creek, and the Little River; high phosphorous concentrations found in the Bush River; low dissolved oxygen levels impaired areas. Each site was sampled from 3 to 7 times for water chemistry and for total coliform, *E. coli*, and heterotrophic bacterial counts. In addition, selected sites were sampled for fish and macroinvertebrate abundance and diversity.